

### **REMARKS**

In response to the Final Office Action mailed June 8, 2009, Applicants respectfully request reconsideration.

Claims 1, 3-8, 10-20, 23-25 and 28 are pending for examination with claims 1, 16, 17, 18, 19, 20, 23 and 25 being independent claims. No claims are amended herein.

#### **Telephone Conference with the Examiner**

Applicants' representative appreciates the courtesies extended by Examiner Wu in granting and conducting a telephone interview on July 8, 2010. Applicants were represented at the interview by Joseph Teja, Jr. During the telephone interview, Applicants' representative and the Examiner discussed the rejections under 35 U.S.C. §101. The Examiner indicated that the rejections under 35 U.S.C. §101 of claims directed to computer-readable storage media would be overcome if the applicant added "non-transitory" to modify the recitation of "computer-readable storage medium." Applicants' representative indicated that they did not believe such an amendment would be required to overcome the §101 rejection, based at least on support in the specification for "computer-readable storage medium," as well as the fact that the Examiner previously had indicated that the claims in question as now pending constituted statutory subject matter. The Examiner encouraged Applicants' representative to summarize their positions in this response, and in the meantime Applicants' representative indicated to the Examiner that the Examiner's proposal for amendments would need to be discussed with the Applicants.

Also discussed during the interview were the rejections under 35 U.S.C. §103, the teachings of Chow (USPN 6,771,966), and the subject matter of claim 1. The Examiner acknowledged the distinction between the teachings of Chow in connection with the selection of links between existing network nodes, and the subject matter of the claims which relate generally to placement locations of new network nodes being added to a network. The Examiner indicated he would reconsider the rejection in view of the distinction pointed out by Applicants' representative.

The remarks and amendments contained herein may serve as a further summary of the interview.

Rejections Under 35 U.S.C. §101

The Office Action rejected claims 25 and 28 under 35 U.S.C. §101, as purportedly not falling within one of the four statutory categories of invention.

Independent claim 25 recites a “computer-readable storage medium.” Claim 28 depends from claim 25.

It is noteworthy that independent claims 16, 18 and 20 similarly recite “computer-readable storage medium;” however, claims 16, 18, and 20 sustain no rejection under 35 U.S.C. §101.

In paragraph [0023], the specification states, “The term computer-readable media as used herein includes both storage media and communications media.” The same paragraph describes communications media as typically embodying “... computer-readable instructions, data structures, program modules, or other data in a modulated data signal such as a carrier wave or other transport mechanism and include any information-delivery media.”

In paragraph [0022], the specification states, “Computer-storage media include volatile and non-volatile, removable and non-removable media implemented in any method or technology for storage of information such as computer-readable instructions, data structures, program modules, or other data. Memory 104, removable storage 108, and non-removable storage 110 are all examples of computer-storage media. Computer-storage media include, but are not limited to, RAM, ROM, EEPROM, flash memory, other memory technology, CD-ROM, digital versatile disks, other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage, other magnetic storage devices, and any other media that can be used to store the desired information and that can be accessed by the computing device.”

Applicants respectfully submit that the context in which this open language appears (specifically, a context in which we (1) explicitly distinguish between computer storage media and communications media, (2) describe communications media as including modulated data signals, and (3) describe computer storage media in terms of several physical devices with no mention of signals) makes the Examiner’s proposal of requiring “non-transitory” language in independent claim 25 unreasonable, just as it would be unreasonable for an examiner to interpret “madeup term” which is described as “including but not limited to a dog, a horse, a rabbit, a snake, a human, a squirrel, a robin, a cat, a frog or any other breathing thing” to include opened bottles of red wine or shirts made

from cotton fabric (both of which are things that “breath” but are clearly not what was intended when “madeupterm” was described).

Accordingly, Applicants respectfully submit that amending the claim to recite a computer storage medium rather than a computer-readable medium or communications medium, as Applicant has done in a previous amendment, is sufficient to overcome the rejections over 35 U.S.C. 101.

Applicants have discussed the rejections under 35 U.S.C. 101 in connection with the pending claims of this application with Caroline D. Dennison of the USPTO’s Office of Patent Legal Administration. In an email communication from Ms. Dennison on Friday, August 13, 2010 to MacLane Key of Microsoft Corporation, Ms. Dennison indicated that the prior addition by the Applicants of “storage” to the computer-readable medium claims narrowed the claims to exclude communication media embodiments that encompass signals per se; accordingly, these claims constitute statutory subject matter.

In view of the foregoing, the present rejections under 35 U.S.C. 101 of claims 25 and 28 should be withdrawn.

#### Rejections Under 35 U.S.C. §103

I. Claims 1 and 16 are rejected under 35 U.S.C. 103(a) based on Chow, U.S. Patent No. 6,771,966 (hereinafter Chow) in view of Ayyagari et al., U.S. Patent Publication No. 2002/0101822 (hereinafter Ayyagari).

#### Independent Claim 1

Claim 1 is directed to a method for determining placement locations of Internet Transit Access Points (ITAPs) in a network. Claim 1 recites, *inter alia*:

selecting, as a new ITAP for the network, the test ITAP from the set of potential ITAPs having a maximum computed value of the node demands satisfied when opened together with ITAPs in the set of currently open ITAPs;

Claim 1 clearly distinguishes over the cited references. Chow describes a “process to provide the best set of radio links or radio topology once the nodes and radio sites have been identified” (col. 9, lines 48-50). Specifically, Chow describes an iterative process for selecting and

eliminating links that is repeated “until the engineer is satisfied with the layout” (col. 9, lines 66-67). By contrast, claim 1 recites “selecting, as a new **ITAP** for the network, the test **ITAP**.”

Internet Transit Access Points (ITAPs) are not equivalent to the links described by Chow. During the interview, the Examiner seemed to appreciate the differences between the iterative process of selecting ITAP locations recited in claim 1 and the iterative process for selecting and eliminating links described in Chow. Ayyagari, which is cited to show contention-based MAC, does not cure the deficiencies of Chow.

In view of the foregoing, Applicants respectfully submit that claim 1 patentably distinguishes over the prior art of record, so that the rejection of claim 1 under 35 U.S.C. §103 should be withdrawn.

Claims 3-8 depend from claim 1 and are patentable based at least upon their dependency. Withdrawal of the rejection of claims 3-8 is respectfully requested.

#### Independent Claim 16

Claim 16, as amended, is directed to a method for determining placement locations of Internet Transit Access Points (ITAPs) in a network. Claim 16 recites, *inter alia*:

- selecting an ITAP, from the set of potential ITAPs to be opened, to be added to a set of currently open ITAPs;

- computing node demands satisfied if the selected ITAP is added to the set of currently open ITAPs;

- when the computing indicates the selected ITAP increases the node demands satisfied when opened together with ITAPs in the set of currently open ITAPs, **adding the selected ITAP to the set of currently opened ITAPs**;

Claim 16 clearly distinguishes over the cited references. It should be clear from the discussion of the references in connection with claim 1 that the prior art of record fails to disclose or suggest “**adding the selected ITAP to the set of currently opened ITAPs**” as recited in claim 16. Chow certainly does not describe adding the selected ITAP “when the computing indicates the selected ITAP increases the node demands satisfied when opened together with ITAPs in the set of currently open ITAPs.”

Accordingly, claim 16 patentably distinguishes over the prior art of record, so that the rejection of claim 16 under 35 U.S.C. §103 should be withdrawn.

Claims 10-15 depend from claim 16 and are patentable based at least upon their dependency. Withdrawal of the rejection of claims 10-15 is respectfully requested.

II. Claims 17-20 and 28 are rejected under 35 U.S.C. 103(a) based on Chow, in view of Ayyagari, in further view of Layson et al., U.S. Patent No. 6,771,966 (hereinafter Layson).

#### Independent Claims 17-20

Independent claims 17-20 each recite a step of adding a node to the set of current open nodes. More specifically, claim 17 recites “adding the selected **access point** to the set of currently opened access points,” claim 18 recites “adding the selected new first **node** to the set of currently opened first nodes,” claim 19 recites “adding the selected new **ITAP** to the set of currently opened ITAPs, where ITAP stands for Internet Transit Access Point,” and claim 20 recites “adding the selected **Internet access node** to the set of currently opened Internet access nodes.”

As discussed above, Chow describes an iterative process for selecting and eliminating links that is repeated until the engineer is satisfied with the layout. During the interview, the Examiner seemed to appreciate the distinction between adding a node to a set of open nodes as recited in claims 17-20 and Chow’s process of selecting and eliminating links. Ayyagari and Layson, are cited to show contention-based MAC and iterating through time intervals, respectively, and do not cure the deficiencies of Chow.

In view of the foregoing, Applicants respectfully submit that claims 17-20 patentably distinguish over the prior art of record, so that the rejection of claims 17-20 under 35 U.S.C. §103 should be withdrawn.

Claim 28 depends from claim 20 and is patentable based at least upon its dependency. Withdrawal of the rejection of claim 28 is respectfully requested.

Comments on Dependent Claims

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance, Applicants believe that it is unnecessary at this time to argue the allowability of each of the dependent claims individually. However, Applicants do not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor do the Applicants concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicants reserve the right to specifically address the patentability of the dependent claims in the future.

**CONCLUSION**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 23/2825 under Docket No. M1103.70167US00 from which the undersigned is authorized to draw.

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Respectfully submitted,

By 

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